BIOENGINEERING CURRICULUM CHART
2007-2008

- AMS 3 or Math 3 or placement
  MATH 19A
  Calculus
- Math 19A
  MATH 19B
  Calculus
- Math 19B
  MATH 23A
  Multivariable
  Calculus
- Math 19B or Math 22 or 23A
  AMS 27/L
  Engineering Math
  (or Math 21 and Math 24)

AMS 7/L ***
Statistical Methods

CHEM 1A *
General Chemistry

AMS 7/L ***
Statistical Methods

Math 19A
(Co-requisite)

AMS 27/L
Engineering Math
(or Math 21 and
Math 24)

PHYS 5A/L
Intro to Physics I
Mechanics

BME 80G
Bioethics in the 21st
Century: Science,
Business, and Society

Complete one of the
following:

- CHEM 1A
  CHEM 1B/M *
  General Chemistry

- CHEM 1B/M
  CHEM 1C/N *
  General Chemistry

- CHEM 1B/M and
  BIOL placement exam
  BIOL 20A
  Cell and Molecular
  Biology

Complete one of the
following:

- BIOL 20A or 21A
  BME 60/L
  Programming for
  Biologists and
  Biochemists

- BIOL 20A or 21A
  BME 160/L
  Research Programming for
  Biologists and Biochemists

MATH 19A
(Co-requisite)

PHYS 5A/L
Intro to Physics II
Waves

PHYS 5B/M
Intro to Physics III
Electricity & Magnetism

PHYS 5C/N
Intro to Physics III
Electricity & Magnetism

PHYS 5C/N and
AMS 27
or Math 21
and Math 24

PHYS 5C/N
and
AMS 27
or Math 24

EE 70/L
Electronic Circuits

PHYS 5C/N
Intro to Physics III
Electricity & Magnetism

PHYS 5A/L
Intro to Physics I
Mechanics

One of:

- BME 104
  Measurements and Instrumentation in Physiology

Prior to first offering of 104, may substitute:

- BIOL 110
  BIOL 130/L
  Human Physiology
  OR
  BIOL 20B and 100
  BIOL 131/L
  Animal Physiology

- CHEM 1C/N
  CHEM 108A/L
  Organic Chemistry

- BME 150
  Biomolecular Mechanics

- BIOL 20B and Chem 7 or 108A or 112A
  BIOL 100
  Biochemistry

- BMB 100 A-B
  Biochemistry and Molecular Biology
  (also satisfies one elective)

- BIOL 105, 110, 115, 119, 120, 125,
  130, 186L
  BIOC: 100B and C
  BME: 110, 155, 205

- BME 150
  Biomolecular Mechanics

- CMPS 12A/L ***
  Intro to Programming

- CMPS 12/L ***
  Computer Systems & Assembly Language

- CMPE 12/L ***
  Intro to Biotechnology

- CMPE 12 or CMPS 12B or 13H
  OR
  CMPE 185
  Technical Writing for Computer Engineers

- Electives
  BIOL: 105, 110, 115, 119, 120, 125,
  130, 186L
  BIOC: 100B and C
  BME: 110, 155, 205

- BME/CMPE/EE 123B Engineering Design Project II (● CMPE 123A)
  - OR -
  Senior Thesis

- BME/CMPE/EE 123A
  Engineering Design Project I
  (● co-requisite: CMPE 185)

- Senior Design Projects
  BME/CMPE/EE 123A Engineering Design Project I
  (● co-requisite: CMPE 185)

Choose four electives (2 must be engineering laboratory courses) - see list of electives above

Prior to graduation, you must:

1. Submit a Portfolio
2. Attend an Exit Interview
3. Complete an Exit Survey

***See prerequisite chart for a list of prerequisites

Faculty Approval

www.soe.ucsc.edu/advising/undergraduate :: advising@soe.ucsc.edu :: (831) 459-5840 :: 9/24/2007

* may substitute any course sequence that enables enrollment in CHEM 108A/L

● = Course prerequisite
BIOENGINEERING BS
DEGREE CURRICULUM

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BENG Electives Approval Form

Student Name ___________________________________________
Student ID ______________________________________________

Elective 1 ____________________________________________
Elective 2 ____________________________________________
Elective 3 ____________________________________________
Elective 4 ____________________________________________

Explanation of choice of electives:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Faculty Advisor’s Approval: _______________________________   Date: ___________